

OPTICAL SYSTEMS FOR MEASURING FORM AND GEOMETRIC DIMENSIONS OF
PRECISION ENGINEERED PARTS

Abstract of the Invention

5 The invention features a method for determining a geometric property of a test object,
the method including: interferometrically profiling a first surface of the test object in a first
coordinate system; interferometrically profiling a second surface of the test object in a
second coordinate system different from the first coordinate system; providing a relationship
between the first and second coordinate system; and calculating the geometric property based
10 on the interferometrically profiled surfaces and the relationship between the first and second
coordinate system. In some embodiments, the relationship may be determined by using
calibrated gage blocks or by using a displacement measuring interferometer. Corresponding
system are also described.

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